

STAFF REPORT
BOARD MEETING DATE: April 12, 2016

CM/ACM _____
Finance _____
DA _____
Risk Mgt. _____
HR _____
Other _____

DATE: March 24, 2016
TO: Board of County Commissioners
FROM: Charlene Albee, Director, Air Quality Management Division
(775) 784-7211, calbee@washoecounty.us
THROUGH: Kevin Dick, District Health Officer, (775) 328-2411
SUBJECT: Discussion and possible adoption of a Resolution Supporting the Implementation of the Washoe County Health District Air Quality Management Division's Ozone Advance Program. (All Commission Districts)

SUMMARY

Discussion and possible adoption of the attached resolution acknowledging the health benefits of voluntary emission reductions and committing to support the Air Quality Management Division's Ozone Advance Program through the implementation of the Action Plan.

BCC Strategic Objective supported by this item: Safe, Secure and Healthy Communities

PREVIOUS ACTION

January 29, 2016. AQMD submitted a request to EPA Region IX to participate in the Ozone Advance Program in order to preserve and improve the air quality in Washoe County. (Attached)

February 3, 2016. EPA confirmed AQMD eligibility to participate in the Ozone Advance Program.

February 25, 2016. District Board of Health unanimously approved the adoption of a resolution supporting the Ozone Advance Program and directed staff to implement the Action Plan.

BACKGROUND

The U.S. Environmental Protection Agency (EPA) strengthened the National Ambient Air Quality Standard for ozone to 70 parts per billion (ppb) from the previous standard of 75 ppb. The most recent three years of monitoring data (2013 – 2015) indicates the design value for Washoe County is 71 ppb which is considered non-attainment under the new standard. In order to achieve attainment with the ozone standard, the Washoe County Health District's Air Quality Management Division (AQMD) has committed to participate in the EPA Ozone Advance Program.

The Ozone Advance Program is a collaborative effort between EPA and local air agencies to promote voluntary emission reductions of ozone precursors. In order to meet the challenges involved with implementing voluntary control measures, the program encourages the adoption of resolutions by elected and appointed governing bodies. Once adopted, the resolutions become a tool to demonstrate to the community stakeholders the commitment to reduce emissions and influence behavior changes through the implementation of the Action Plan. The attached resolution acknowledges the health benefits of voluntary emission reductions and provides direction to staff to implement the Ozone Advance Action Plan.

FISCAL IMPACT

As these are voluntary emission reduction measures, there are no fiscal impacts associated with the adoption of the resolution.

RECOMMENDATION

The Air Quality Management Division recommends the Board of County Commissioners adopt the Resolution Supporting the Implementation of the Air Quality Management Division's Ozone Advance Program and direct staff to implement the approved measures as part of the Action Plan.

POSSIBLE MOTION

Move to adopt the Resolution Supporting the Implementation of the Air Quality Management Division's Ozone Advance Program and direct staff to implement the approved measures as part of the Action Plan.

RESOLUTION

WHEREAS, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

WHEREAS, an action plan under the Ozone Advance Program would achieve emission reductions by implementing voluntary measures tailored to Washoe County; and

WHEREAS, the Air Quality Management Division (AQMD) of the Washoe County Health District is responsible for ensuring the air we breathe meets the health-based NAAQS for all pollutants including ozone; and

WHEREAS, breathing harmful levels of ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion; and

WHEREAS, children, the elderly, and those with existing respiratory illnesses are at greatest risk from exposure to ozone; and

WHEREAS, motor vehicles are the largest category of ozone precursor emissions; and

WHEREAS, measures to improve air quality benefit public health, the environment, and economic development; and

WHEREAS, clean air is essential to a healthy community; and

WHEREAS, a successful Ozone Advance Program will require a collaborative effort by all of the Health District's partners.

NOW, THEREFORE, BE IT RESOLVED,

The Washoe County Board of Commissioners commits to support the following measures as part of the AQMD's Ozone Advance Program:

Measure 1: Support Health District and Regional plans that reduce ozone levels including:
Air Quality State Implementation Plans
Community Health Improvement Plans
Regional Transportation Plans

Measure 2: Encourage sustainable plans, policies, and codes throughout Washoe County that:
Minimize motor vehicle trips and vehicle miles traveled
Support active transportation such as walking and biking
Support public transportation
Minimize vehicle idling
Reduce per capita energy usage
Reduce per capita waste material taken to landfills
Minimize water consumption and street runoff
Increase the community's tree canopy

Measure 3: Implement sustainable practices in Health District operations including:
Employee Trip Reduction programs
Energy conservation and efficiency projects
Limiting Health District vehicle idling to less than 3 minutes
Keeping Health District vehicles maintained including properly inflated tires
Increasing zero emissions and alternative fuel vehicles in the Health District fleet

This Resolution shall become effective upon adoption by the Washoe County Board of Commissioners.

ADOPTED this 12th day of April, 2016.

Kitty K. Jung, Chair

ATTEST:

Washoe County Clerk

WASHOE COUNTY HEALTH DISTRICT

ENHANCING QUALITY OF LIFE

January 29, 2016

Ozone Advance
c/o Laura Bunte
U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards, C304-01
Research Triangle Park, NC 27711

Subject: Participation in Ozone Advance

Dear Ms. Bunte:

The Washoe County Health District, Air Quality Management Division (AQMD) is requesting to participate in Ozone Advance program. We wish to join this partnership with EPA to preserve and improve the air quality in Washoe County, Nevada. We meet the following program eligibility criteria:

1. Washoe County is not currently a nonattainment area for either the 1997 8-hour nor the 2008 8-hour National Ambient Air Quality Standard (NAAQS) for ozone;
2. The following air monitors reflect the air quality in Washoe County:

<u>AQS ID</u>	<u>Site Name</u>
32-031-0016	Reno
32-031-0020	South Reno
32-031-0025	Toll Road
32-031-1005	Sparks
32-031-2002	Incline Village
32-031-2009	Lemmon Valley

3. Existing emissions inventory reporting requirements have been met.

We understand that our efforts under Ozone Advance may benefit Washoe County by potentially:

- Reducing air pollution in terms of ozone as well as other air pollutants,
- Ensuring continued healthy ozone levels,
- Maintaining the ozone NAAQS,
- Helping avoid exceedances and violations of the ozone NAAQS that could lead to a future nonattainment designation,
- Increasing public awareness about ground-level ozone as an air pollutant, and
- Targeting limited resources toward actions to address ozone problems quickly.

Our goal is to implement measures and programs to reduce ozone in Washoe County in the near term. We agree that it is in our best interest to work together and in coordination with stakeholders and the public to proactively pursue this goal.



Subject: Ozone Advance Participation
Date: January 29, 2016
Page 2 of 2

Feel free to contact Ms. Charlene Albee (calbee@washoecounty.us; (775) 784-7211) or Mr. Daniel Inouye (dinouye@washoecounty.us; (775) 784-7214) of my staff if you need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Dick", written in a cursive style.

Kevin Dick
District Health Officer
Washoe County Health District

cc: John Kelly, EPA Region IX
Karina O'Connor, EPA Region IX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

February 3, 2016

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Kevin Dick
District Health Officer
Washoe County Health District, Air Quality Management Division
1001 East Ninth Street, P.O. Box 11130
Reno, NV 89520

Dear Mr. Dick,

Thank you for your letter indicating interest on the part of the Washoe County Health District, Air Quality Management Division in joining the Ozone Advance program with respect to Washoe County, Nevada. We have confirmed your eligibility to participate, and we welcome your involvement in this innovative program.

We appreciate your interest in improving air quality in Washoe County, and we look forward to assisting you as you identify, evaluate, select, and implement measures and programs tailored to your area that may reduce ozone levels and increase public awareness.

Your primary EPA point of contact will be Karina O'Connor, EPA Region 9; Karina can be reached at (775) 434-8176 or oconnor.karina@epa.gov. General questions about the program may be referred to Laura Bunte of my staff at (919) 541-0889 or advance@epa.gov. For resources to help you with your work to improve air quality, please refer to www.epa.gov/advance.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg A. Green".

Gregory A. Green
Director, Outreach and Information Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency

cc: Karina O'Connor, EPA Region 9
Laura Bunte, EPA OAQPS

WASHOE COUNTY HEALTH DISTRICT

ENHANCING QUALITY OF LIFE

WHEREAS, the Ozone Advance Program is a voluntary local approach to ozone attainment whose purpose is to encourage early emission reductions keeping Washoe County in attainment of the health-based National Ambient Air Quality Standard (NAAQS) for ozone; and

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WHEREAS, clean air is essential to a healthy community; and

WHEREAS, a successful Ozone Advance Program will require a collaborative effort by all of the Health District's partners.

NOW, THEREFORE, BE IT RESOLVED,

The Washoe County District Board of Health commits to support the following measures as part of the AQMD's Ozone Advance Program:

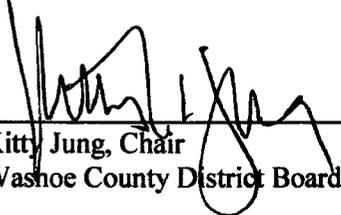
Measure 1: Support Health District and Regional plans that reduce ozone levels including:
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This Resolution shall become effective upon adoption by the Washoe County District Board of Health.

ADOPTED this 25th day of February, 2016.



Kitty Jung, Chair
Washoe County District Board of Health

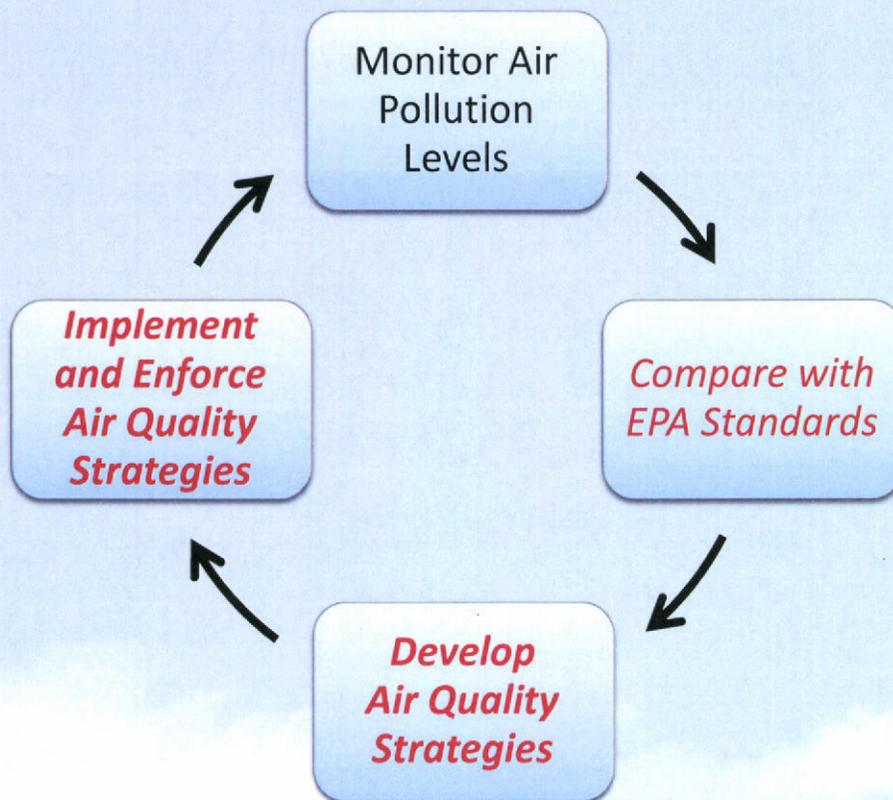
Air Quality in Washoe County



Accomplishments & Challenges

Charlene Albee, Director
Air Quality Management Division
Washoe County Health District
April 12, 2016

Air Quality Management Process



National Ambient Air Quality Standards

Pollutant	Averaging Time	Level	Design Value
PM2.5	24-hour	35 $\mu\text{g}/\text{m}^3$	32 $\mu\text{g}/\text{m}^3$
	Annual	12 $\mu\text{g}/\text{m}^3$	10 $\mu\text{g}/\text{m}^3$
PM10	24-hour	150 $\mu\text{g}/\text{m}^3$	0.0 expected exceedances
Ozone	8-hour	75 ppb	71 ppb
Carbon Monoxide	1-hour	35 ppm	3.4 ppm
	8-hour	9 ppm	2.7 ppm
Nitrogen Dioxide	1-hour	100 ppb	54 ppb
	Annual	53 ppb	14 ppb
Sulfur Dioxide	1-hour	75 ppb	6 ppb
Lead	Rolling 3-month	0.15 $\mu\text{g}/\text{m}^3$	n/a

What does Non-Attainment mean?

- Our air is harmful to breathe, especially for the young, elderly, and people with chronic lung diseases
- Requires AQM agencies to develop a plan to achieve the standard
- Can limit/delay/stop economic development and expansion

Developing Air Quality Strategies

- Identify sources that contribute to ozone
- Identify programs and technology that can reduce emissions from those sources
- Develop, promote, and implement these programs and technology

Carbon Monoxide (CO)

8-hour CO NAAQS Designations:

- 1978 Non-Attainment
- 1991 Moderate Non-Attainment
- 2008 Attainment/Maintenance

Control Strategies:

Vehicle Smog Checks, Oxygenated Fuels Program,
Solid Fuel Burning Restrictions (Wood Stove Program)

PM10

24-hour NAAQS Designations:

- 1978 Non-Attainment for TSP
- 1987 Moderate Non-Attainment for PM10
- 2001 Serious Non-Attainment
- 2011 Attaining NAAQS based on clean data finding
- **2016 Attainment/Maintenance Plan for PM10**

Control Strategies:

Dust Control Regulations, Street Sanding/Sweeping, Woodstoves Regulations, Green-Yellow-Red Burn Code

Ozone

Ozone NAAQS Designations:

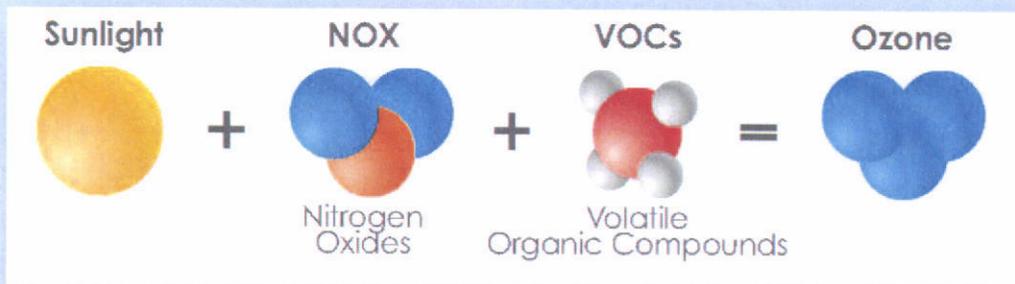
- 1991 Marginal Non-Attainment 1-hr NAAQS
- 2008 Attainment 8-hr NAAQS (1-hr rescinded)
- 2015 NAAQS revision - 70 ppb

(Current Design Value **71** ppb)

Control Strategies:

- Existing Programs and Regulations
- Voluntary Emission Reductions

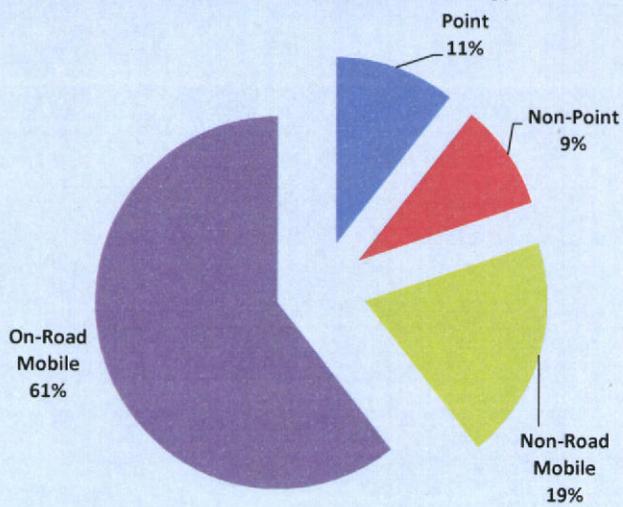
How Does Ozone Form?



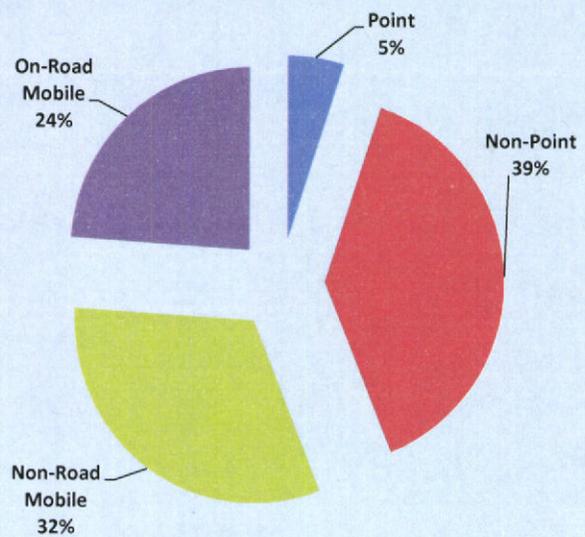
- Ultraviolet Radiation: sunlight
- NO_x: combustion sources such as cars, trucks, trains, construction equipment, engines, generators, boilers
- VOC: combustion sources, gasoline storage and dispensing, solvents

Sources of NOx & VOCs

NOx Emissions (85,927 lbs/day)



VOC Emissions (71,113 lbs/day)



Air Quality Strategies

- Current strategies
 - Federal tailpipe and fuel standards
 - Local AQM rules for stationary engines, gas stations, and other NOx/VOC sources
- Voluntary Strategies – **Ozone Advance Program**
 - Reduce Vehicle Miles Traveled
 - Reduce and/or Eliminate Tailpipe Emissions
 - Idle Reduction Campaign
 - Smart growth and partnerships
 - Built Environment

Ozone Designation Timeline

Voluntary Strategies	Now
Initial Recommendation	2016
EPA Initial Designations	2017
Attainment	2020

4th/Prater RAPID Transit Project



SafeRoutes



**Clean
Cities**

U. S. Department of Energy



Idle
Reduction



Keep
it
Clean.

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